

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 April 2001 (12.04.2001)

PCT

(10) International Publication Number
WO 01/24972 A3

(51) International Patent Classification⁷: B66D 1/00, 1/36

(21) International Application Number: PCT/US00/27754

(22) International Filing Date: 6 October 2000 (06.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/158,406 7 October 1999 (07.10.1999) US
60/190,772 20 March 2000 (20.03.2000) US

(71) Applicant (for all designated States except US):
UNI-HOIST, LLC [US/US]; 800 16th Avenue North,
Clanton, AL 35045 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CHOATE, Gary, E.

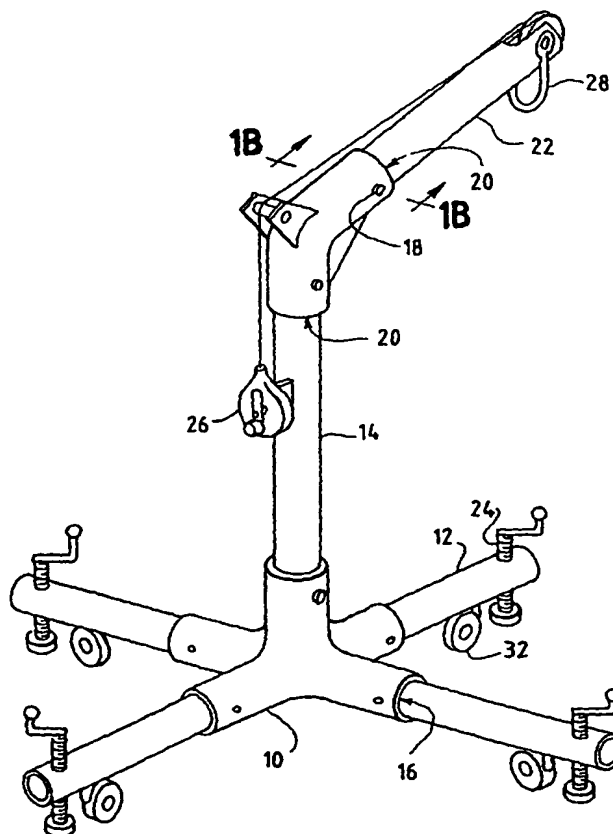
[US/US]; 1055 Holland Street, Lakewood, CO 80215 (US).
HAWKINS, Dustin, L. [US/US]; 7711 SW 36th Avenue,
Portland, OR 97219 (US). INMAN, Edward [US/US];
1405 S. Mariposa, Denver, CO 80223 (US).

(74) Agent: GILLY, Richard, P.; Richard P. Gilly Intellectual
Property Law Offices, P.C., One Penn Center, Suite 1500,
1617 John F. Kennedy Boulevard, Philadelphia, PA 19103-
1815 (US).

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ,
BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: CONFINED SPACE ENTRY DEVICE AND RELATED METHOD OF ASSEMBLY



(57) Abstract: A confined space entry device has modularized components which allow the device to be readily reconfigured. In particular, the extension arm (22) of the device is removably secured to one leg of an elbow (18), while a post or mast (14) is removably secured to the other end of the elbow. The other end of the mast is removably secured to a base which supports the confined space entry device. In one version of the invention, the device includes tubular members made of a polymer composite material. In another version of the invention, the elbow is asymmetric about a central axis and is formed of cast aluminum. The device can include sets of different-length elongated members which can be interchanged with elongated members secured within the device.

WO 01/24972 A3



(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(88) **Date of publication of the international search report:**
21 March 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:
— with international search report

The demand must be filed directly with competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:

IPEA/ US

PCT

CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only

Identification of IPEA	Date of receipt of DEMAND
------------------------	---------------------------

Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION		Applicant's or agent's file reference 600-3001
International application No. PCT/US00/27754	International filing date (day/month/year) 06 October 2000 (06.10.00)	(Earliest) Priority date (day/month/year) 07 October 1999 (07.10.99)

Title of invention
Confined space entry device and related method of assembly

Box No. II APPLICANT(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) Uni-Hoist, LLC 800 16th Avenue North Clanton, Alabama 35045 United States of America	Telephone No. (202) 755-7710
	Facsimile No. (202) 755-7246
	Teleprinter No. N/A
	Applicant's registration No. with the Office N/A

State (that is, country) of nationality:
US

State (that is, country) of residence:
US

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

CHOATE, Gary E.
1055 Holland Street
Lakewood, Colorado 80215
United States of America

State (that is, country) of nationality:
US

State (that is, country) of residence:
US

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

HAWKINS, Dustin L.
7711 SW 36th Avenue
Portland, Oregon 97219
United States of America

State (that is, country) of nationality:
US

State (that is, country) of residence:
US

☒ Further applicants are indicated on a continuation sheet.

See Notes to the demand form

Sheet No. 2.

International application No.

PCT/US00/27754

Continuation of Box No. II APPLICANT(S)

*If none of the following sub-boxes is used, this sheet should not be included in the demand.*Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*

INMAN, Edward
1405 S. Mariposa
Denver, Colorado 80223
United States of America

State *(that is, country)* of nationality:

US

State *(that is, country)* of residence:

US

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*State *(that is, country)* of nationality:State *(that is, country)* of residence:Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*State *(that is, country)* of nationality:State *(that is, country)* of residence:Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*State *(that is, country)* of nationality:State *(that is, country)* of residence:☐

Further applicants are indicated on another continuation sheet.

Sheet No. 3.

International application No.
PCT/US00/27754**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The following person is ☒ agent ☐ common representative
 and ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.
☐ is hereby appointed and any earlier appointment of (an) agent(s) /common representative is hereby revoked.
☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.

Name and address: (Family name followed by given name; for a legal entity, full official designation.
 The address must include postal code and name of country.)

GILLY, Richard P.
 Richard P. Gilly Intellectual Property Law Offices, P.C.
 One Penn Center - Suite 1500
 1617 John F. Kennedy Boulevard
 Philadelphia, Pennsylvania 19103-1815

Telephone No.
 (215) 557-2880

Facsimile No.
 (215) 557-2885

Teleprinter No.
 N/A

Agent's registration No. with the Office
 37,630

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION**Statement concerning amendments: ***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filed.

the description ☒ as originally filed
☐ as amended under Article 34

the claims ☒ as originally filed
☐ as amended under Article 19 (together with any accompanying statement)
☐ as amended under Article 34

the drawings ☒ as originally filed
☐ as amended under Article 34

2. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.

3. ☒ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). (This check-box may be marked only where the time limit under Article 19 has not yet expired.)

* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: English

- ☒ which is the language in which the international application was filed.
☐ which is the language of a translation furnished for the purposes of international search.
☐ which is the language of publication of the international application.
☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.

Box No. V ELECTION OF STATES

The applicant hereby elects all eligible States (that is, all States which have been designated and which are bound by Chapter II of the PCT)

excluding the following States which the applicant wishes not to elect:

See Notes to the demand form

Sheet No. 4.

International application No.

PCT/US00/27754

Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- | | | |
|--|---|--------|
| 1. translation of international application | : | sheets |
| 2. amendments under Article 34 | : | shcets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | sheets |
| 5. letter | : | sheets |
| 6. other (specify) | : | shcets |

For International Preliminary Examining Authority use only

received not received

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

The demand is also accompanied by the item(s) marked below:

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> fee calculation sheet | 5. <input type="checkbox"/> statement explaining lack of signature |
| 2. <input type="checkbox"/> original separat power of attorney | 6. <input type="checkbox"/> sequence listing in computer readable form |
| 3. <input type="checkbox"/> original general power of attorney | 7. <input type="checkbox"/> other (specify): |
| 4. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | |

Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).


Richard P. Gilly, Reg. No. 37,630
(Attorney for Applicants)

Richard P. Gilly Intellectual Property Law Offices, P.C.
One Penn Center - Suite 1500
1617 John F. Kennedy Boulevard
Philadelphia, PA 19103-1815
(215) 557-2880
FAX: (215) 557-2885

For International Preliminary Examining Authority use only

- Date of actual receipt of DEMAND:
- Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):
- ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.
 ☐ The applicant has been informed accordingly.
- ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.
- ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

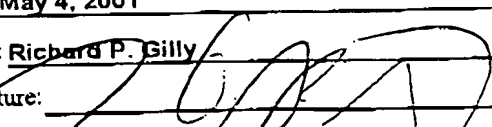
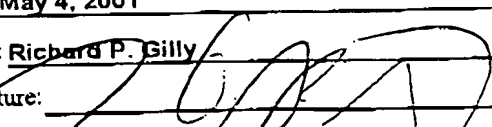
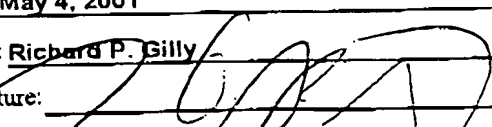
Demand received from IPEA on:

CHAPTER II

PCT

FEE CALCULATION SHEET

Annex to the Demand

<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%;">International application No.</td><td style="width: 50%;">PCT/US00/27754</td></tr><tr><td>Applicant's or agent's file reference</td><td>600-3001</td></tr></table>	International application No.	PCT/US00/27754	Applicant's or agent's file reference	600-3001	<div style="border: 1px solid black; padding: 5px;">For International Preliminary Examining Authority use only</div> <div style="border: 1px solid black; padding: 5px; height: 150px; margin-top: 10px;">Date stamp of the IPEA</div>												
International application No.	PCT/US00/27754																
Applicant's or agent's file reference	600-3001																
Applicant Uni-Hoist, LLC																	
CALCULATION OF PRESCRIBED FEES <table style="width: 100%;"><tr><td style="width: 40%;">1. Preliminary examination fee</td><td style="width: 20%; text-align: right;">490.00</td><td style="width: 10%; text-align: center;">P</td><td style="width: 30%;"></td></tr><tr><td>2. Handling fee <i>(Applicants from certain States are entitled to a reduction of 75% of the handling fee. Where the applicant is (or all applicants are) so entitled, the amount to be entered at H is 25% of the handling fee.)</i></td><td style="text-align: right;">137.00</td><td style="text-align: center;">H</td><td></td></tr><tr><td>3. Total of prescribed fees Add the amounts entered at P and H and enter total in the TOTAL box</td><td style="text-align: right;">627.00</td><td></td><td></td></tr><tr><td></td><td style="text-align: right;">TOTAL</td><td></td><td></td></tr></table>		1. Preliminary examination fee	490.00	P		2. Handling fee <i>(Applicants from certain States are entitled to a reduction of 75% of the handling fee. Where the applicant is (or all applicants are) so entitled, the amount to be entered at H is 25% of the handling fee.)</i>	137.00	H		3. Total of prescribed fees Add the amounts entered at P and H and enter total in the TOTAL box	627.00				TOTAL		
1. Preliminary examination fee	490.00	P															
2. Handling fee <i>(Applicants from certain States are entitled to a reduction of 75% of the handling fee. Where the applicant is (or all applicants are) so entitled, the amount to be entered at H is 25% of the handling fee.)</i>	137.00	H															
3. Total of prescribed fees Add the amounts entered at P and H and enter total in the TOTAL box	627.00																
	TOTAL																
MODE OF PAYMENT <table style="width: 100%;"><tr><td><input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)</td><td><input type="checkbox"/> cash</td></tr><tr><td><input checked="" type="checkbox"/> cheque</td><td><input type="checkbox"/> revenue stamps</td></tr><tr><td><input type="checkbox"/> postal money order</td><td><input type="checkbox"/> coupons</td></tr><tr><td><input type="checkbox"/> bank draft</td><td><input type="checkbox"/> other (specify):</td></tr></table>		<input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash	<input checked="" type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps	<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons	<input type="checkbox"/> bank draft	<input type="checkbox"/> other (specify):								
<input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash																
<input checked="" type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps																
<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons																
<input type="checkbox"/> bank draft	<input type="checkbox"/> other (specify):																
AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT ACCOUNT <i>(This mode of payment may not be available at all IPEAs)</i> <table style="width: 100%;"><tr><td style="width: 50%; vertical-align: top;"><input type="checkbox"/> Authorization to charge the total fees indicated above. <input checked="" type="checkbox"/> <i>(This check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.</td><td style="width: 50%; vertical-align: top;">IPEA/ <u>US</u> Deposit Account No.: <u>50-0895</u> Date: <u>May 4, 2001</u> Name: <u>Richard P. Gilly</u> Signature: </td></tr></table>		<input type="checkbox"/> Authorization to charge the total fees indicated above. <input checked="" type="checkbox"/> <i>(This check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.	IPEA/ <u>US</u> Deposit Account No.: <u>50-0895</u> Date: <u>May 4, 2001</u> Name: <u>Richard P. Gilly</u> Signature: 														
<input type="checkbox"/> Authorization to charge the total fees indicated above. <input checked="" type="checkbox"/> <i>(This check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.	IPEA/ <u>US</u> Deposit Account No.: <u>50-0895</u> Date: <u>May 4, 2001</u> Name: <u>Richard P. Gilly</u> Signature: 																

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)Applicant(s): **Uni-Hoist, LLC**

Docket No.

600-3001

Serial No.

PCT/US00/27754

Filing Date

06 October 2000

Examiner

Group Art Unit

Invention: **Confined space entry device and related method of assembly**

I hereby certify that the following correspondence:

PCT Demand; PCT Fee Calculation sheet; Transmittal to USPTO (designated elected office); Check in amount of \$727.00*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231

May 4, 2001*(Date)*Helen Cikalo*(Typed or Printed Name of Person Mailing Correspondence)*Helen Cikalo*(Signature of Person Mailing Correspondence)*EL593391177US*("Express Mail" Mailing Label Number)*

From the INTERNATIONAL SEARCHING AUTHORITY

To:
 RICHARD P. GILLY
 RICHARD P. GILLY INTELLECTUAL PROPERTY
 LAW OFFICES, P.C.; ONE PENN CENTER
 1617 JOHN F. KENNEDY BLVD., SUITE 1500
 PHILADELPHIA, PA 19103-1815

PCT

NOTIFICATION OF TRANSMITTAL OF
 THE INTERNATIONAL SEARCH REPORT
 OR THE DECLARATION

(PCT Rule 44.1)

	Date of Mailing (day/month/year) 14 AUG 2001
Applicant's or agent's file reference 600-3001	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/US00/27754	International filing date (day/month/year) 06 October 2000 (06.10.2000)
Applicant UNI-HOIST, LLC	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.
Filing of amendments and statement under Article 19:
 The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):
- When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.
- Where?** Directly to the International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland
 Facsimile No.: (41-22) 740.14.35
- For more detailed instructions, see the notes on the accompanying sheet.
2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4. **Further action(s):** The applicant is reminded of the following:
- Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 bis 1 and 90 bis 3, respectively, before the completion of the technical preparations for international publication.
- Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).
- Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the ISA/US
 Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231
 Facsimile No. (703)305-3230

Authorized officer

Katherine Matecki

Telephone No. (703)308-1113

NOTES TO FORM PCT/ISA/220 (continued)

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under Article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

The statement should be brief, it should not exceed 500 words if in English or if translated into English.

It should not be confounded with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It should not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

In what language ?

The amendments must be made in the language in which the international application is published. The letter and any statement accompanying the amendments must be in the same language as the international application if that language is English or French; otherwise, it must be in English or French, at the choice of the applicant.

Consequence if a demand for international preliminary examination has already been filed ?

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase ?

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty and of the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended ?

The claims only.

The description and the drawings may only be amended during international preliminary examination under Chapter II.

When ? Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments ?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How ? Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

What documents must/may accompany the amendments ?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confounded with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

INTERNATIONAL SEARCH REPORT

Internat application No.

PCT/US00/27754

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B66D 1/00, 1/36 ✓

US CL : 254/266, 325, 334

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 254/266, 325, 334, 264, 335

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,083,395 A (DANIELS) 28 January 1992 (28.02.1992), column 3, lines 32-52.	1, 2
---		-----
Y		3-15
Y	US 1,239,524 A (ROOT) 11 September 1917 (11.09.1917), see entire document	3-15
A	US 1,978,999 A (JONES) 30 October 1934 (30.10.1934)	
A	US 5,195,726 A (KANER) 23 March 1993 (23.03.1993)	
A	US 5,765,809 A (BAKER et al.) 16 June 1998 (16.06.1998)	
A,E	US 6,202,868 B1 (MURRAY) 20 March 2001 (20.03.2001)	
A	GB 2 038 774 A (BELLAMY) 30 July 1980 (30.07.1980)	

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

30 June 2001 (30.06.2001)

Date of mailing of the international search report

14 AUG 2001

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks
Box 500
Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Katherine Matecki

Telephone No. (703)308-1113

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 600-3001	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US00/27754	International filing date (<i>day/month/year</i>) 06 October 2000 (06.10.2000)	(Earliest) Priority Date (<i>day/month/year</i>) 07 October 1999 (07.10.1999)
Applicant UNI-HOIST, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 1A



as suggested by the applicant.



None of the figures



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

NEW ABSTRACT

A confined space entry device has modularized components which allow the device to be readily reconfigured. In particular, the extension arm (22) of the device is removably secured to one leg of an elbow (18), while a post or mast (14) is removably secured to the other end of the elbow. The other end of the mast is removably secured to a base which supports the confined space entry device.

In one version of the invention the device includes tubular members made of a polymer composite material. In another version of the invention, the elbow is asymmetric about a central axis and is formed of cast aluminum. The device can include sets of different-length elongated members which can be interchanged with elongated members secured within the device.

INTERNATIONAL SEARCH REPORT

national application No.

PCT/US00/27754

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B66D 1/00, 1/36
 US CL : 254/266, 325, 334

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 254/266, 325, 334, 264, 335

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,083,395 A (DANIELS) 28 January 1992 (28.02.1992), column 3, lines 32-52.	1, 2
---		-----
Y		3-15
Y	US 1,239,524 A (ROOT) 11 September 1917 (11.09.1917), see entire document	3-15
A	US 1,978,999 A (JONES) 30 October 1934 (30.10.1934)	
A	US 5,195,726 A (KANER) 23 March 1993 (23.03.1993)	
A	US 5,765,809 A (BAKER et al.) 16 June 1998 (16.06.1998)	
A,E	US 6,202,868 B1 (MURRAY) 20 March 2001 (20.03.2001)	
A	GB 2 038 774 A (BELLAMY) 30 July 1980 (30.07.1980)	

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

30 June 2001 (30.06.2001)

Date of mailing of the international search report

14 AUG 2001

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Katherine Matocki

Telephone No. (703)308-1113